Listing of Claims

1. (Currently amended) A method for analyzing an interaction between a sugar chain and a protein that interacts with a sugar chain, wherein the method comprises the steps of:

(a) contacting a fluorescently labeled subject sugar chain or subject glycoconjugate with a substrate onto which a protein that interacts with a sugar chain has been immobilized; ~~and~~

(b) measuring the intensity of an excited fluorescence after applying an excitation light without washing the substrate;

(c) digitizing the fluorescence intensity; and

(d) quantifying the fluorescence intensity.

2. (Previously presented) The method of claim 1, wherein the substrate onto which the protein that interacts with the sugar chain has been immobilized is a substrate coated with a compound comprising an epoxy group as an active group.

3. (Original) The method of claim 2, wherein the compound comprising an epoxy group as an active group is 3-glycidoxypropyl trimethoxysilane (GTMS).

4-10. (Canceled)

11. (Previously presented) The method of claim 1, wherein the protein that interacts with a sugar chain is a lectin, an enzymatic protein comprising a sugar-binding domain, a cytokine having an affinity for a sugar chain, or an antibody that interacts with a sugar chain.

12. (Previously presented) The method of claim 1, wherein the excitation light is an evanescent wave.

13. (Previously presented) The method of claim 1, wherein the glycoconjugate is a glycoprotein, a proteoglycan, or a glycolipid.

14. (Previously presented) A substrate coated with a compound comprising an epoxy group as an active group, onto which a protein that interacts with a sugar chain has been

immobilized, and in which one or more reaction vessels have been formed by affixing a rubber having one or more holes onto a glass.

15. (Original) The substrate of claim 14, wherein the compound comprising an epoxy group as an active group is 3-glycidoxypropyl trimethoxysilane (GTMS).

16. (Canceled)

17. (Previously presented) The substrate of claim 14, wherein the protein that interacts with a sugar chain is a lectin, an enzymatic protein comprising a sugar-binding domain, a cytokine having an affinity for a sugar chain, or an antibody that interacts with a sugar chain.

18-28. (Canceled)

29. (New) The method of claim 11, wherein the protein that interacts with a sugar chain is a lectin.

30. (New) The method of claim 12, wherein the evanescent wave is generated by total internal reflection of the excitation light.

31. (New) The method of claim 1, further comprising:

comparing the fluorescence intensity with a database of fluorescence intensities of known sugar chains; and

determining the identity of the labeled sugar chain by selecting a sugar chain of known structure having a matching pattern of fluorescence intensity.

32. (New) A method for analyzing an interaction between a sugar chain and a protein that interacts with a sugar chain, comprising:

contacting a sample comprising at least one fluorescently labeled glycoprotein with a glass slide comprising one or more lectin conjugated to the glass slide through an epoxy group of 3-glycidoxypropyl trimethoxysilane;

applying an excitation light to the substrate without washing the substrate;

generating an evanescent wave by total internal reflection of the excitation light; and

measuring intensity of emitted fluorescent light generated by the evanescent wave, wherein an increase in the emitted fluorescent light indicates the interaction between the fluorescently labeled glycoprotein and the lectin.